Comment Number	Page Number	Line, Figure, or Table No.	Commentor	Comment	
1	iv	last paragraph		This paragraph discusses the "time value of water": "water in the system is most valuable for all uses at times when it is scarce." It is not clear that this economic metaphor holds for ecological "uses" (some degree of variability is okay for natural systems, even when a similar amount of variability results in disaster for farm workers, tractor salesmen, and consumers); it would be more accurate to say "the greatest conflict over water occurs at times when it is scarce". Even though this might seem fairly obvious, the original statement sounds too much like "water wasting to the ocean, and doing nothing for anyone along the way."	
2	v	1st paragraph		This paragraph is apparently the first mention of the common programs in the Executive Summary. It is followed immediately by a description of the three alternatives (each of which mentions the common programs). We recommend adding a section here, before the description of the alternatives, that describes in more detail the common programs, what they are trying to accomplish, and summarizing any outstanding controversies about the common programs.	
3	vi	bold paragraph		Delete the bold; delete the phrase "followed by Alternative 2" in the first sentence.	
4	vi	list of bullets		Add a bullet something like: "How well do the CALFED Common Programs perform? Can they be modified or implemented in other ways to perform better?"	
5	vi	1st bullet		Isn't "consistency with the solution principles" one of the distinguishing characteristics? Since we've already evaluated the alternatives against these, I'd delete the bullet.	
6	vi	2nd bullet		This bullet should more clearly focus on the operational assurances issue that it is really trying to address. Change to something like (but probably more complete than): "Can the public be provided adequate assurances about the operations of any new facilities constructed by CALFED?" This could be integrated more clearly in the last bullet in this list.	

7	4	"Vision"		Incorporate a few changes into the "Vision": (1) introduce it a little better, say with an italicized sentence or two, so readers will clearly know it is a hypothetical "vision of the future"; (2) delete the sentence "There are no longer any fish species in the system listed under the Endangered Species Act"–the "vision" should focus on the goal of recovered and restored ecosystem, rather than species' status under regulations; (3) the first paragraph should more clearly state that project operations are now (that is, then) benefitting fish–as it is now, it suggests the main problem to be overcome is "the adverse effects of undesirable exotic species"; (4) delete the last sentence in the third paragraph ("Sustained improvements in the fish ...."), which seems to suggest willy-nilly project operations once fish populations have recovered, with a likely spiral back to the present situation; instead, in 2030, we hope to see project operations integrate environmental considerations, some of which may be even more restrictive than the existing requirements; and (5) unless CALFED itself is planning "substantial investments in treatment and containment", which isn't clear from the Phase II report, delete the sentence about toxic drainage from mines.	
8	5	1st paragraph		Delete the sentence "During periods of shortage, water holds its highest value for all uses." Strongly consider deleting the following sentence as well. First, that sentence generally describes all water development projects (they store water in times of plenty, and they make it available when it otherwise wouldn't be); what's unique about CALFED is not this approach, but the complete integration of all the purposes into the project. Second, it is very apparent what has water "taken in times of plenty": not the whole "system", just the environment–in particular, delta outflow, and San Francisco Bay. It's probably an oversimplification, but some people are going to look at this as essentially neglecting the time value of water to other users. Will less water be delivered to ag and urban users in "times of plenty"? Or only to the environment? Deleting these two sentences wouldn't affect the meaning of this paragraph much (although I'm not sure what would be lost be deleting, or more likely moving, the entire paragraph).	
9	7-8	conveyance alternatives		In the paragraph connecting these two pages, separate the discussion of the conveyance alternatives from storage considerations. Suggest changing it so the 3 conveyance alternatives are discussed, then adding a final sentence that says "Each of these alternatives also includes consideration of new ground and surface water storage options ranging from 0 to XXXX acre-feet." It may be there was no all-inclusive range for Phase I, but this should let the reader know that no new storage remains a valid option.	

10	9	Next Steps		Delete the phrase "determine the appropriate operating criteria" from the 1st paragraph. It is unlikely we could all come to agreement on long-term, "appropriate operating criteria" for the existing system, let alone for a new system that only exists on paper. Those criteria will be developed and refined for many years to come (isn't that the point of adaptive management?).	
11	12	1st bullet		Change the last sentence under *Fisheries and Diversions* to: "The need to protect species of concern has necessitated regulations that allow sufficient fishery flows to remain in the natural system, which can restrict the quantity and timing of diversions."	
12	12	2nd bullet		Delete the last two sentences under *Habitat Changes and Land Use*, and replace with: "Efforts to restore habitat often require changes in existing land use, thus creating conflict with existing uses such as agriculture and levee maintenance."	
13	18	Ecosystem Rest., 1st paragraph		In general, reservoir operations, no matter how environmentally sensitive, do not "restore [flows] to more natural patterns". (On some uncontrolled rivers that have greatly altered watersheds, this may be possible–but not below Shasta, Oroville, and Folsom reservoirs.) Those high flow patterns are themselves "natural" (or close to it). Change this sentence to something like: "By acquiring water for the ecosystem through transfers and by using storage facilities to capture water at high flow periods, additional flows can be made available at appropriate times to meet the needs of aquatic species."	
14	18	Ecosystem Rest., 2nd paragraph		Delete the last sentence of this paragraph, and move the first sentence up to end the preceding paragraph.	
15	20	1st bullet		Creation of shallow water habitat for fish within delta conveyance channels, as is suggested by this bullet, will rarely be a good idea–even with the reduced channel velocities of some versions of alternative 2 (note that this bullet is not limited to alt 2). We don't want to rely on these channels for delta smelt spawning habitat, and they're probably not the best places for foraging habitat for salmon smolts, either. Minimizing the exposure of fish to the conveyance system (especially poor swimmers, like delta smelt, and eggs and larvae of all species) should be a basic goal of the ecosystem restoration and delta conveyance components of the program. This bullet could refer to shallow water habitat to benefit shorebirds and waterfowl.	

16	21	"Time Value"		The narrative discussion does a good job explaining that flow variability, and periodic high peak flows, are valuable to the environment. If the time value of water is to be a kind of keystone concept supporting all of CALFED, this section would probably benefit from a discussion of how the time value of water differs for different water users. Basically, we want to maintain and restore a variable flow pattern (that includes some really good conditions) for the environment, while other users generally prefer less variation and a more constant supply. The reluctance of other users to accept greatly reduced supplies during droughts leads to conflicts with the environment, and creates the time value of water (and, of course, led to the construction of water projects in the first place). This is most clearly seen in the figure on p24: the combined "other uses" are reduced by about 30% across year types, while environmental flows (characterized as delta outflow) are reduced by about 85%. A comparison of delta outflow to exports shows where the time value of water really applies: exports are apparently greater in critical and dry years than in above normal and wet years (a little unexpected: even if direct demand is lower because of other sources, exports still fill San Luis and other southern storage reservoirs). It seems reasonably clear that the time value concept does apply to export supplies. We can only assume that it also applies to the environment. Again, the narrative does a good job explaining the risks, and asserts that it will only happen if it can be ensured that the impacts of diversion are less than the benefits of additional releases–but the analysis is (and probably only can be) hand-waving at this point. However, the discussion of the importance of occasional high flows should also look at impacts further downstream (the Bay, suisun marsh), should discuss fish species that benefit from such flows (like longfin smelt and splittail), and should discuss any known relationships between high outflows and subsequent recruitment of salmonid populations.	

17	25-26	the figures		These two figures in particular do not inspire much confidence in the time value concept, at least when it's based on the use of new storage. The figure on p25 shows significant diversions to storage that continue even at relatively low river flows (apparently around 10000 cfs). What does the environment get in return? The figure on p26 suggests, a couple of days of increased releases in March, and a 10-day pulse in May, and that's it. A good portion of the release from storage occurs in July through September, when it would benefit water supply much more than the environmental needs we usually think of as requiring additional flows. Is new storage the only way to take advantage of the time value of water? Are there other mechanisms (e.g., reoperation of existing reservoirs, or water pricing reform) that could take advantage of this time value but not result in the potential environmental impacts of new reservoir construction (or require that the "low value water from the environment" be the primary source of the "high value water for all users")? If there are other opportunities, they should be discussed in the report.	
18	29	Other Concepts		Recommend deleting this entire section. As it is, is seems like a "miscellaneous" section; mostly, it identifies issues that would be better addressed in chapter 5. If the section is not deleted, we have a number of comments and questions:	
19	29	Common Delta Pool		This section suggests that the "common pool" is a necessary part of all CALFED alternatives. Does this mean CALFED could not consider an alternative that did not include south delta diversions for export, but that provided the entire export supply through an isolated facility? We recommend deleting this section and discussing the common pool in chapter 5 (without making a commitment that CALFED will necessarily continue the export system's dependence on the common pool).	
20	30	Conjunctive Management....		This discussion seems premature; CALFED has not yet determined that any additional storage, or any conjunctive ground and surface water storage, will be a part of the CALFED program. Delete.	
21	30	Area of Origin		This section is unnecessary; it seems only to say, "CALFED intends to comply with existing law, and is not planning to recommend any changes to the law". However, it almost suggests there may be some areas of law that CALFED may recommend changing. Delete.	

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22	31	Coordinated Permitting		This section also seems premature; it could be discussed as a potential part of the implementation strategy in chapter 5. If it is not deleted, it should be revised so as to not suggest that any agency intends to transfer its statutory responsibilities to a "new regulatory permit review team". Change the second sentence, second paragraph, to: "The regulatory team would provide timely review of environmental documentation ~~and permitting~~, close interagency cooperation, and development of mitigation measures and monitoring requirements~~, and completion of biological opinions~~."	
23	35	3rd paragraph		The last sentence of this paragraph suggests that the storage and conveyance elements of the Program are not to be guided by "an ongoing adaptive management framework", and do not "require local partnerships, coordination and cooperation". This overstates the case. New storage facilities will almost certainly be constructed as partnerships; some of these partners may well be local (e.g., for ground water storage, for on-stream surface water projects, and off-stream storage north of the delta). Furthermore, it is likely to be many years before any new facilities are constructed; do we really mean to suggest we won't use the new information we develop between now and then to guide their implementation? We should be explicitly providing for off-ramps, should our views about these facilities change before they are constructed. Delete the last sentence.	
24	37	Levees "Issues and Concerns" box		Add a bullet: "Is the goal of reconstructing all Delta levees to the U.S. Army Corps of Engineers PL84-99 standard consistent with ecosystem protection and restoration in the Delta?"	
25	38	figure, Levee Enlargement		We have previously commented on levee designs when they appeared in the Levee System Integrity Program Plan. The diagram shows the water-land interface covered with riprap which, as shown, would result in a net loss of shallow water habitat under most flow conditions. Modify the design to show a net increase of shallow water habitat, and state in the text that this design is consistent with goals of the ERPP and LSIP.	
26	40	ERPP "Issues and Concerns" box		Insert a bullet: "Can the ERPP goals be fully met irrespective of which of the conveyance alternatives is selected?"	
27	45	WUE "Issues and Concerns" box		Add a bullet: "Should CALFED be more directly involved in implementing water use efficiency measures as one method to acquire water needed for environmental purposes?"	

28	48	Transfers "Issues and Concerns" box		Add a bullet that says something like: "The degree to which transfers, especially north-to-south transfers across the Delta, can be made environmentally beneficial (as opposed to environmentally benign) is not clear. Transferring non-project water across the Delta is likely to have many of the same environmental effects as exporting project water."	
29	51	Issues and Concerns		The box for "storage issues and concerns" should include something like: "There are significant concerns related to assuring the operation of any new storage facilities, including assuring that diversions to storage occur only during environmentally benign times (probably most difficult to assure for onstream storage), and that releases of water dedicated to the environment is driven first and foremost by environmental needs rather than benefits to other users water supplies." Also, recommend deleting the last sentence of the first paragraph of the "storage" section.	
30	52	"Some Delta Flow Statistics"		The purpose of this box is not clear; also, it is presented entirely in averages, after the Phase II report has concluded that such average numbers are of little value. Delete the box.	
31	55	Los Banos Grandes Reservoir		Change the last sentence of this section to say: "In the absence of detailed mitigation costs, ~~While~~ the project appears to be among the most economical of prospective surface storage reservoirs; ~~the feasibility of mitigating several~~ however, it is unlikely the significant environmental impacts associated with the project ~~has been questioned~~ can be successfully mitigated."	
32	56	Conveyance, 2nd paragraph		Delete this paragraph. This discussion of the ISDP is not relevant here, and the 2 paragraphs before and after it seem to flow together nicely. Also delete the reference to ISDP in the "Existing System Conveyance" section on p57.	

33	57	last 3 paragraphs		This discussion suggests that the components of the ISDP are included in all alternatives. This is not the case; some alternatives do not include south delta improvements, and others include "barriers or equivalent"). Change the second sentence in "Existing System Conveyance" to say: "One significant variation from existing conditions would include ~~some~~ selected ~~channel~~ improvements in the southern Delta ~~together with flow and stage barriers at selected locations~~ to allow for increasing the permitted pumping rate at the SWP export facility to the full ~~existing~~ physical capacity of 10,300 cfs ~~(similar to DWR's Interim South Delta Project)~~." If this section uses "variation" as in "variations of alternative 1", this should be clarified; the concept of "12 variations on 3 alternatives" has not been presented at this point.	
34	57	Modified Through Delta Conveyance		While alternative 2 generally improves delta flow patterns for fish compared to alternative 1, it does not do so "throughout the Delta". Change the last sentence of this section to say: "Variations include a wide variety of channel configurations, designed to improve flow patterns to benefit fisheries ~~throughout the Delta~~, provide flood control, and improve water quality in many part of the Delta."	
35	57	Dual Delta Conveyance		Do all versions of alternative 3 include "modified through delta channels"? Change the first sentence to say: "The dual Delta conveyance alternative is formed around a combination of ~~modified~~ through Delta ~~channels~~ conveyance (via either the existing or modified Delta channels) and a new canal or pipeline . . . ."	
36	68	4th bullet		Is land conversion the only way to reduce demand? Why wouldn't other water use efficiency measures also reduce demand, and possibly reduce this conflict? We may all agree it's unlikely this would be fully successful--just as we'd agree that improved fish screens aren't going to fully address this problem, either (but they get a bullet).	

37	68	"Considerations on Screening"		This section should mention that, "Like the current screens, the new screen designs will still be unable to successfully screen eggs and larvae of all species, and will be generally unsuccessful in screening poor-swimming resident fish species, such as delta smelt." In addition, this section should state that even with improved fish screens at the export pumps, fish salvage operations would still be required; these operations reduce the effectiveness of the screens significantly, as many fish do not survive the salvage and trucking operations. Delta smelt are only the most obvious example (the overall effectiveness of a screen and salvage approach in protecting delta smelt is close to zero); other species also undergo significant mortality during salvage, trucking, and dumping operations.	
39	69	3rd bullet		Change the third bullet to start: "Migratory ~~species~~ fish of the Sacramento Valley will all be exposed to screens at Hood, whereas ~~the south Delta diversion has much less direct effect on these species~~ some proportion of these fish are not directly exposed to the export facilities in the south Delta."	
40	70	1st paragraph		Is this section out of place? It doesn't seem to fit with what comes before or after, while what comes after does fit with what came before.	

40	73	Operating Criteria		In general, the discussion of operating criteria for new facilities should be separated from the sensitivity analysis requested by the CALFED agencies; the sensitivity analysis should only be presented in a "sidebar" (not in the main text). Results of analyses based on these changes to the existing standards should also be limited to sidebars. As it is presented now, it suggests we know more about future operations and standards than we actually do. In fact, we can't even begin to predict what standards would regulate a new system 30 or so years from now. We especially should not be hinting that no more restrictive criteria would ever be imposed on alternative 3 (later in the document, this seems to be used as the basis of the conclusion that alternative 3 is more robust in the face of uncertainty about future operating criteria than the other alternatives--although the assessment of the alternatives 1 and 2 included more restrictive criteria, and alternative 3 did not). This discussion should note that the criteria used for the sensitivity analysis do not represent the full range of criteria that could be applied to the project in the future. For example, the management/policy teams explicitly asked for a sensitivity analysis to changes in either direction of the current outflow standards; even this is not available at this time (the decision to use X3 now seems unfortunate; if the IDT had planned this for public use, we would have probably held out for evaluating changes to the existing standards by varying the number of days at each of the compliance points), and no more restrictive criteria are applied to alternative 3 (for example, a bypass flow requirement at the Hood diversion is one likely possibility under both alternatives 2 and 3).	
42	84	Description of Alt 3		This section should carefully distinguish what is definitely in the alternative from what is potentially in the alternative. In particular, the delta channel improvements and the flow control barriers are only potentially in the alternative. For example, the 2nd bullet under "Ecosystem Restoration" (p84) would only apply if the alternative includes conveyance channel improvements in the north delta; the box on p87 should also be revised. The alternative figure (p90) should be revised to delete the channel modifications and the flow control barriers; at a minimum, the barriers should be described as the channel modifications are now ("Possible flow control barriers or equivalent"), and not be drawn on the figure in the dark color that seems to represent new structures.	

43	87	Comparison box		This box states that "All variations of Alternative 3 would continue to carry 33% to 66% of the total Delta export pumping." This is contradicted in several places in the following discussion of the Phase II report alternative 3, which states that about 20% of total exports would be diverted from the south delta, and 80% through the isolated facility. Recommend deleting this sentence; at a minimum, delete the 33% to 66% reference and replace with something like "... would continue to carry some portion of the total Delta export pumping."	
44	96	1st paragraph, 3rd sentence		Delete this sentence. While we may agree with the statement, we should let the reader decide if the modeled difference would be biologically meaningful.	
45	96	X2 Position figure		This figure compares X2 position among the 3 alternatives. Such a comparison was difficult with the IDT alternatives because the DSM studies for the different alternatives were based on different DWRSIM runs, which had different assumptions about (among other things) storage, that could themselves have affected the location of X2 irrespective of conveyance method. Are the results presented here based on the same assumptions about storage and hydrology? If based on different assumptions, the comparison probably has little meaning.	
46	96	2nd paragraph, and 2nd figure		Delete this figure and paragraph. As was discussed at the last management team meeting, X2 is itself averaged over at least one complete tidal cycle.	
47	99	Text and Figures		This discussion of changes in in-Delta water quality should include additional information about their meaning and significance that help the reader understand how (or if) they matter to in-Delta use of water. One possible method we have discussed in various meetings is to compare the frequency of violations of appropriate water quality standards in the delta.	
48	100	Export Water Quality		Surprisingly, the narrative discussion on Export Water Quality does not discuss alternative 3 at all. Given the benefits of alternative 3 to export water quality, this should include at least a brief summary (like that presented for alternative 2). Also, the narrative discusses the importance of bromides and organic carbon, and predicted bromide figures are presented, but the alternatives' relative performance against these important measures are not discussed. Even if these are treated in greater detail in chapter 5, they should be summarized here.	

49	101	Bullets		Recommend deleting these bullets, which are cut-and-pasted from a discussion of the advantages of the relocated diversion from another chapter. In any case, the second bullet should be deleted from any discussion of alternative 2 (as the very next sentence makes clear).	
50	102	2nd paragraph		The assumptions behind the conclusion that "the 3 CALFED alternatives would affect diversion losses for Sacramento River salmon only minimally" should be presented in greater detail. One key assumption is that none of the CALFED alternatives would substantially improve (relative to the other alternatives) the survival of salmon that end up diverted into the central delta. However, it is quite possible that those alternatives that restore natural flow circulation in the delta would result in improved survival of these fish (which, after all, evolved in a system that included these natural flow splits). This suggests a minor benefit for alt 2 (if at all, because of the likelihood of fish being diverted directly into the conveyance channels), and a substantially greater benefit for alternative 3. Of course, this benefit may be offset by reduced survival in the Sacramento River below the diversion, but there should still be a net difference among the alternatives. At least, the Phase II report should reflect that there is not complete agreement on this conclusion.	
51	102	3rd paragraph		The last sentence of this paragraph should be deleted, or changed to say something like: "The judgement of the experts is that there is little overall difference between alternatives 1 and 2." This would better reflect the related figure. Compared to alternative 1, alternative 2 might be better for delta smelt and some other resident species (note that this benefit accrues largely through changes in flow circulation in the central and western delta, not because of true improvements in entrainment). However, it is not clear that alternative 2 would benefit delta smelt in those years when they are most vulnerable to the diversions (when the majority of the smelt population is located in the southern and eastern delta). The net effect may be to produce more delta smelt in good years, and kill more in bad. If the changes in alternative 2 make the export facilities a more effective and efficient killer of delta smelt, the overall effect may even be negative for delta smelt. Alternative 2 is likely to be substantially worse than alternative 1 for Sacramento basin salmonids (especially when the barrier to upstream return is considered), and provide no improvement for San Joaquin basin salmonids.	

52	102	Delta Flow Circulation		It would be useful to present this as a comparison of QWEST values for the alternatives. This would likely have more meaning for many readers than the presented comparisons of flows at Antioch and Old River.	
53	104	2nd paragraph		Again, note that benefits of the improved flow circulation in alternative 2 go to those delta smelt in the central and western delta. In some years, this is a substantial portion of the total delta smelt population, and alternative 2 would really benefit delta smelt. In other years, however, only a relatively small portion of the population may be found this far downstream, and alternative 2 would have little or no benefit to delta smelt.	
54	105	"Water Supply Opportunities"		This distinguishing characteristic is apparently discussed here only because of the differences among the alternatives in providing water supplies with different standards in place. See our next comment for a discussion of the appropriateness of this analysis (and the resulting conclusion). We recommend deleting "Water Supply Opportunities" from the list of "Most Significant Distinguishing Characteristics". A very abbreviated version could be included among the distinguishing characteristics that do not vary greatly among the alternatives (beginning on p91); any discussion of how water supplies are affected by changes to existing standards should be presented only in a sidebar, if presented at all. Without additional information (especially about the response of all alternatives to both strengthened and weakened standards), even a sidebar presentation will be of little value.	

55	109	1st full paragraph		The conclusion in this paragraph that "the uncertainty regarding water supply opportunities under Alternative 3 is much less than the uncertainty under Alternatives 1 and 2" is entirely dependent on the range of criteria used to model operations for each alternative. Not surprisingly, since alternative 3 includes no "more protective" criteria (only less protective criteria), water supply impacts are never as bad as they are in alternatives that do include more protective operating criteria as part of the sensitivity analysis, and so alternative 3 seems more robust. The narrative seems to acknowledge that this conclusion is valid only "to the extent the ranges of operating criteria evaluated in this sensitivity analysis represent the range of potential future Bay-Delta standards", but we know this is not the case. No attempt was made to identify such a range of potential future standards for each alternative; the sensitivity analysis was not intended to go that far. We can easily imagine more protective criteria being included in any alternative, including alternative 3 (e.g., a higher bypass flow past the diversion at Hood; including isolated facility diversions in the inflow:export ratio; longer shutdowns of the isolated facility diversion to protect fish at the diversion site; and so on). Since we know the analysis does not provide the basis for the conclusion, we should not make the conclusion. The limited modeling results we have that are suitable for this comparison suggest that alternative 3 is no more robust than alternative 2; it may even be less robust. The figures on p107 suggest there is a greater difference in alternative 3 than 2 between "existing standards" and "relaxed X2". It would be interesting to compare both to a "strengthened X2".	
56	109	Operational Flexibility		It is not clear why alternative 2 has greater operational flexibility than alternative 1. Both alternatives rely on the existing export facilities in the south delta; alternative 2 provides no more opportunities to turn off this diversion than alternative 1. While alternative 2 can turn off the Hood diversion, this only serves to avoid impacts that don't occur in alternative 1 (where there is no Hood diversion). Explain this in more detail, or change to show alternatives 1 and 2 as having the same degree of operational flexibility.	
57	111	Table		Why is "water transfer opportunities" included in this table (see p91)? Also, for the reasons discussed above, delete "water supply opportunities" from the table.	

58	111	second to last paragraph		Delete the sentence that says "Therefore, irrespective of whether these two characteristics are the most important to selection of the preferred alternative, they are the characteristics most dependent on that decision." The table on this page, and the earlier discussion, suggest that this is not true; in any case, it only confuses the issue. This paragraph should include additional explanation why the other "most significant" distinguishing characteristics no longer seem significant in distinguishing among the alternatives.	
59	113	"Issues to be Addressed" box		This box suggests that, among other things, this chapter will discuss a process for "Program Element Refinement and Implementation Plan Development" for the common programs, but there does not seem to be any such discussion in the chapter. It would be helpful if this discussion was here; it should describe the process CALFED expects to use to improve the alternatives between now and the final PEIS, and describe how stakeholders and the general public will be involved in that process. At least, this discussion should use one of the common programs as a model for the others. Water Use Efficiency might be the most interesting choice, though more information is probably available for the ERPP. The box also identifies "operating criteria" and "404 process", although they are not discussed in the narrative. Rather than add a discussion, these should be deleted from the box. "404 process" fits better where it is in the narrative (as a continuing work effort), and suggesting that the question of "operating criteria" needs to be resolved before a preferred alternative can be selected sets the bar too high. These criteria will be modified through adaptive management for years to come.	

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60	117	"Diversion Effects on Fisheries"		This discussion seems too narrow. We are concerned with how the CALFED program, taken as a whole, affects fisheries--not just with how the conveyance alternatives result in reduced or increased diversion of fish from the delta. While we can look at this particular question in isolation, that isolated look should not be used as the basis for the final decision on a CALFED alternative. We need to include an understanding of the alternatives' effects on delta flow circulation; the likely success of the ERPP in protecting fish and fish habitat (including how the ERPP may interact with any other component--such as delta conveyance--of an alternative); the effects of water quality improvement measures; any reductions in demand resulting from successful implementation of the water use efficiency program; changes in river and delta flows resulting from potential new or increased storage; and so on. Even when looking at just the conveyance alternatives, effects on delta flow patterns are an important consideration. We recommend that this section be re-titled "Implications of the Delta Decision on Fisheries Recovery"; a minimum revision would re-title the section "Implications of the Conveyance Decision on Fisheries Recovery (though that would probably not be consistent with the purpose of the chapter). In either case, the section would be rewritten to include a broader range of effects on fish. For example, the first paragraph of the section could be revised to something like: "Direct and indirect effects of the existing projects are thought to be an important, perhaps critical, factor in the decline and endangerment of some fish species. Individual aspects of the current problem include predation in Clifton Court; entrainment of fish, eggs, and larvae at the SWP and CVP export pumps (partly due to inadequate fish screen facilities); mortality associated with the need to capture, sort, and transport fish to Delta channels away from the screens; adverse flow patterns induced by the transport of Sacramento River water across the Delta for diversion, which affect the migration and spawning of fish species; and reductions in habitat availability (and the decline in conditions in the remaining habitat) caused by changes in flow conditions below project reservoirs and the north-to-south transport of water across the Delta to the export facilities."	

61	117	Bottom paragraph		The definition of diversion effects on fisheries should be expanded to include those other effects of program alternatives which may affect fisheries, such as Delta flow circulation. If the object here is to determine the best alternative for fisheries, a broader vision of fisheries effects is needed. At the February 19, 1998 "Diversion Effects on Fisheries" meeting held at CALFED, it was clear that differences in fish entrainment alone may not provide decision-makers with adequate information to select the best alternatives. The discussion here should be expanded to accommodate indirect effects of diversions as well as entrainment. Expanding the definition here would minimize the number of additional changes that would have to be made to this section.	
62	118	second paragraph		Remove the second bullet which states: "Fish using the Delta..." This is only a "fundamental advantage" of an alternative that does not include continued significant diversions in the south delta; it's an advantage of relocating the diversion entirely, not of adding a new or improved channel (even with an effective screen) that directs water more efficiently to the diversion in the south delta.	
63	121	2nd full paragraph		This paragraph states that San Joaquin system chinook would benefit in alternative 2 "by improved flow distribution in the western delta". True--for those fish that get that far. It's certainly not clear that any more would then than do today. This section should acknowledge that the improved delta flow circulation under alternative 2 will do little if anything to benefit San Joaquin basin chinook; the primary improvements occur too far to the west. It also states that diversion effects on San Joaquin chinook salmon under alternative 3 would be reduced by about 80%. This is probably an underestimate, based on the assessment that alternative 3 reduces diversions from the south delta by about 80% over the entire year. During the March through May period when San Joaquin basin smolts are vulnerable to the direct effects of the south delta diversions, it is likely that considerably less than 20% of current diversions would continue from the south delta. For example, in April and May, no diversions at all are made in the south delta in alternative 3 (all exports are of water delivered by the isolated facility).	
64	121	4th full paragraph		Revise the first sentence to something like: "The central question is whether, even with screen relocation and improvement, the effects of continued diversions from the south delta (including entrainment effects and changes in delta flow patterns) will outweigh the benefits afforded by the other elements of the CALFED program?"	

65	122	list of bulleted questions		The list of issues that may be directed to the science review panel seems too narrowly focused. For example, bypass flows at a Hood diversion would generally benefit fish moving past the screens more than eggs and larvae (which are benefited more by turning the pumps off, though they'd benefit from increased bypass flows as well). Also, why would we ask "will Sacramento and San Joaquin salmon benefit more from upstream work than Delta actions?" Will this direct our work effort in any way? Isn't it more likely they need the package of both to enjoy full benefits? We know the answer to the last question (about the range of operating criteria): "no". We don't need to ask a science review panel about that. Consider deleting the list, and briefly expanding the narrative to say the panel will address issues that still need to be further defined.	
66	132	"ESA Compliance" section		This is an outdated discussion. It should be replaced with the most recent "overview" section of the appendix prepared by the ESA Compliance team. Marti Kie or Sharon Gross will provide the appropriate text.	